CLAIMS

1. Method to provide a medium voltage interconnection for realizing an electrical connection between a receiving connector of a first equipment station and a receiving connector of a second equipment station,
said method comprising the steps of:
- providing an electrical connector mating said receiving connector at each end of a metal conductor, said metal conductor with its two connectors forming a conductive core,
- providing a flexible tube made of at least an insulating layer of elastomeric material,
- expanding radially said flexible tube and sliding therein said conductive core, and
- releasing said flexible tube over said conductive core.

2. Method according to claim 1, further comprising the steps of:
- providing said electrical connector with a substantially conical shape of which the base has a diameter relatively larger than the diameter of said metal conductor, and
- connecting said base to an end of said metal conductor.

3. Method according to claim 1, further comprising the step of engaging one end of said flexible tube into an inner side of a conical bushing means made of insulating material and provided with said receiving connector so as to bring the electrical connector of the conductive core into contact with said receiving connector and said insulating layer of said flexible tube into contact with said inner side of said bushing means.

4. Method according to claim 1, comprising the steps of providing said flexible tube with, coaxially starting from the center:

- a first semiconductive layer,

- an insulating layer made of elastomeric material, and
- a second semiconductive layer.

5. Method according to claim 3, comprising the steps of providing said flexible tube with, coaxially starting from the center:

- a first semiconductive layer,
- an insulating layer made of elastomeric material, and
- a second semiconductive layer, and

further comprising the step of removing partially said second semiconductive layer at the end of said flexible tube prior to the step of engaging said end of said flexible tube into said bushing means.

6. Method according to claim 4, comprising the steps of:

- providing a ring groove into said first semiconductive layer, and
- providing a ring groove partially into said insulating layer.

7. Method according to claim 1, further comprising the steps of:

- providing an external locking ring onto at least one electrical connector of said conductive core, and
- providing into said flexible tube at least one internal ring groove for receiving the locking ring of said electrical connector when the tube is released over said conductive core.

8. Method according to claim 1, wherein said flexible tube has the same length as said conductive core.

9. Medium voltage interconnection, said interconnection being made according to claim 1 and adapted to electrically connect a receiving connector of a first

equipment station and a receiving connector of a second equipment station, said interconnection comprising a conductive core including a metal conductor with, at each end thereof, an electrical connector adapted to mate said receiving connector, and a flexible tube having at least an insulating layer made of elastomeric material and covering the whole conductive core.

10. Medium voltage interconnection according to claim 9, wherein said elastomeric material is a synthetic terpolymer of ethylene, propylene and diene [EPDM].

11. Medium voltage interconnection according to claim 9, wherein said elastomeric material is a silicone.

12. Medium voltage interconnection according to claim 9, wherein said electrical connector has a substantially conical shape of which the base is connected to said metal conductor, said base having a diameter relatively larger than the diameter of said metal conductor.

13. Medium voltage interconnection according to claim 12, wherein one end of said flexible tube is adapted to be engaged into an inner side of a conical bushing means made of insulating material and provided with said receiving connector, the electrical connector of said conductive core being adapted to be brought into electrical contact with said receiving connector, and said insulating layer of said flexible tube being adapted to be brought into contact with said inner side of said bushing means.

14. Medium voltage interconnection according to claim 13, wherein said interconnection is provided with a fixing ring located over said conductive core and over said flexible tube, said fixing ring being adapted to abut against the base of the conical electrical connector and to be fixed to said bushing means.

15. Medium voltage interconnection according to claim 9, wherein said flexible tube is a multi-layer tube comprising, coaxially starting from the center, a first semiconductive layer, an insulating layer made of elastomeric material, and a second semiconductive layer.

16. Medium voltage interconnection according to claim 9, wherein the electrical connector of said conductive core is provided with an external locking ring mating in an internal ring groove in the insulating layer of said flexible tube.